CLAIMS

1. A method for facilitating supply chain collaboration in a network environment, said supply chain including an enterprise and at least one supplier, the method comprising:

generating and transmitting an unconstrained forecast to said at least one supplier;

receiving, from said at least one supplier, a supplier capability statement;

generating a constrained forecast using at least one supplier capability statement;

transmitting said constrained forecast to said at least one supplier; and

receiving, from said at least one supplier, a formal commitment to product a needed supply indicated in said constrained forecast.

2. The method of claim 1, wherein said generating said constrained forecast includes:

performing a squared set analysis upon said supplier capability statement; and

adding capacity constraints during said analysis.

3. The method of claim 1, wherein said generating and transmitting said unconstrained forecast to said at least one supplier includes receiving an aggregated demand from a group associated with said enterprise, said aggregated demand exploded into time-bucketed materials requirements for said group.

4. The method of claim 3 wherein said group includes a division of said enterprise which shares common materials requirements.

5. The method of claim 4 wherein said group is distributed among a plurality of site locations for said enterprise over said network environment.

6. The method of claim 3, wherein said supplier capability statement is transmitted to said group, said group associated with said at least one supplier.

7. The method of claim 3, wherein said supplier capability statement includes a greatest amount of materials said at least one supplier is able to make available to said group.

8. The method of claim 2, wherein said performing said squared set analysis includes feeding said supplier capability statement into a constraint-based optimization tool.

9. The method of claim 1, wherein said constrained forecast includes a demand for materials factoring in resource constraints.

10. The method of claim 8, wherein a squared set build plan is generated by said constraint-based optimization tool.

11. The method of claim 10, wherein said squared set build plan is fed to a materials resource planning engine and requirements for a squared set constrained forecast are generated, said requirements directed to a site location for said enterprise.

12. The method of claim 11, wherein said squared set constrained forecast is transmitted to said at least one supplier, said at least one supplier associated with said site location for said enterprise.

13. The method of claim 1, wherein said formal commitment includes an agreement by said at least one supplier to provide said needed supply to said enterprise.

14. The method of claim 1, further comprising:

monitoring inventory levels at a replenishment service center by said at least one supplier based upon said formal commitment;

refilling inventory items at said replenishment service center according to said formal commitment;

facilitating delivery of said inventory items to a site location for said enterprise by transmitting a pull signal to said replenishment service center; and

receiving said inventory items in response to said pull signal.

15. The method of claim 14, wherein said monitoring said inventory levels at said replenishment service center includes providing said site location for said enterprise, said at least one supplier, and said replenishment service center a visibility of said inventory materials in transit.

16. The method of claim 14, wherein said monitoring said inventory levels by said at least one supplier includes maintaining a minimum supply level.

17. The method of claim 16, wherein said minimum supply level is measured in days of supply at said replenishment service center.

18. The method of claim 17, wherein said days of supply is calculated by rationalizing current units of inventory against expected consumption.

19. The method of claim 18, wherein said expected consumption represents said constrained forecast.

20. The method of claim 14, wherein said monitoring said inventory levels is performed by accessing an inventory status provided by said replenishment service center.

21. The method of claim 14, wherein said site location for said enterprise monitors said inventory levels.

22. The method of claim 14, wherein said refilling said inventory items includes:

providing an advance ship notice to said replenishment service center and said site location for said enterprise; and

updating a database to indicate when said inventory items are shipped.

23. The method of claim 14, wherein said transmitting said pull signal to said replenishment service center includes providing a pull request number to said replenishment service center requesting delivery of said inventory items, wherein a transfer order is generated at said replenishment service center in response to said pull signal.

24. The method of claim 23, wherein a goods issued document is created in response to preparing said inventory items for delivery, said goods issued document including said pull request number.

25. The method of claim 24, wherein a goods receipt is generated upon delivery of said inventory items, said goods receipt associated with said pull request number.

26. A storage medium encoded with machine-readable computer program code for facilitating supply chain collaboration in a network environment, said supply chain including an enterprise and at least one supplier, the storage medium including instructions for causing a computer to implement a method comprising:

generating and transmitting an unconstrained forecast to said at least one supplier;

receiving, from said at least one supplier, a supplier capability statement;

generating a constrained forecast using at least one supplier capability statement;

transmitting said constrained forecast to said at least one supplier; and

receiving, from said at least one supplier, a formal commitment to product a needed supply indicated in said constrained forecast.

27. The storage medium of claim 26, wherein said generating said constrained forecast includes:

performing a squared set analysis upon said supplier capability statement; and

adding capacity constraints during said analysis.

28. The storage medium of claim 26, wherein said generating and transmitting said unconstrained forecast to said at least one supplier includes receiving an aggregated demand from a group associated with said enterprise, said aggregated demand exploded into time-bucketed materials requirements for said group.

29. The storage medium of claim 28 wherein said group includes a division of said enterprise which shares common materials requirements.

30. The storage medium of claim 29 wherein said group is distributed among a plurality of site locations for said enterprise over said network environment.

31. The storage medium of claim 28, wherein said supplier capability statement is transmitted to said group, said group associated with said at least one supplier.

32. The storage medium of claim 28, wherein said supplier capability statement includes a greatest amount of materials said at least one supplier is able to make available to said group.

33. The storage medium of claim 27, wherein said performing said squared set analysis includes feeding said supplier capability statement into a constraint-based optimization tool.

34. The storage medium of claim 26, wherein said constrained forecast includes a demand for materials factoring in resource constraints.

35. The storage medium of claim 33, wherein a squared set build plan is generated by said constraint-based optimization tool.

36. The storage medium of claim 35, wherein said squared set build plan is fed to a materials resource planning engine and requirements for a squared set constrained forecast are generated, said requirements directed to a site location for said enterprise.

37. The storage medium of claim 36, wherein said squared set constrained forecast is transmitted to said at least one supplier, said at least one supplier associated with said site location for said enterprise.

38. The storage medium of claim 26, wherein said formal commitment includes an agreement by said at least one supplier to provide said needed supply to said enterprise.

39. The storage medium of claim 26, further comprising instructions for causing a computer to implement:

monitoring inventory levels at a replenishment service center by said at least one supplier based upon said formal commitment;

refilling inventory items at said replenishment service center according to said formal commitment;

facilitating delivery of said inventory items to a site location for said enterprise by transmitting a pull signal to said replenishment service center; and

receiving said inventory items in response to said pull signal.

40. The storage medium of claim 39, wherein said monitoring said inventory levels at said replenishment service center includes providing said site location for said enterprise, said at least one supplier, and said replenishment service center a visibility of said inventory materials in transit.

41. The storage medium of claim 39, wherein said monitoring said inventory levels by said at least one supplier includes maintaining a minimum supply level.

42. The storage medium of claim 41, wherein said minimum supply level is measured in days of supply at said replenishment service center.

43. The storage medium of claim 42, wherein said days of supply is calculated by rationalizing current units of inventory against expected consumption.

44. The storage medium of claim 43, wherein said expected consumption represents said constrained forecast.

45. The storage medium of claim 39, wherein said monitoring said inventory levels is performed by accessing an inventory status provided by said replenishment service center.

46. The storage medium of claim 39, wherein said site location for said enterprise monitors said inventory levels.

47. The storage medium of claim 39, wherein said refilling said inventory items includes:

providing an advance ship notice to said replenishment service center and said site location for said enterprise; and

updating a database to indicate when said inventory items are shipped.

48. The storage medium of claim 39, wherein said transmitting said pull signal to said replenishment service center includes providing a pull request number to said replenishment service center requesting delivery of said inventory items, wherein a transfer order is generated at said replenishment service center in response to said pull signal.

49. The storage medium of claim 48, wherein a goods issued document is created in response to preparing said inventory items for delivery, said goods issued document including said pull request number.

50. The storage medium of claim 49, wherein a goods receipt is generated upon delivery of said inventory items, said goods receipt associated with said pull request number.